## BOOK REVIEW

John Banister and his natural history of Virginia, 1678-1692, by Joseph and Nesta Ewan. 1970. University of Illinois Press, Urbana, Ill. 61801. 485 p., 69 fig. Cloth, \$15.00.

Although not well known to entomologists, John Banister was the first university trained naturalist to send specimens, drawings, and Latin descriptions of plants, insects, arachnids, and molluscs from North America to the leading naturalists in England. Unfortunately he met accidental death before his plans materialized to publish a "methodized" account of Virginia natural history. His catalogues and manuscripts, although surviving incompletely, shed considerable light on early natural history of North America.

The book is a masterpiece of biography, tracing nearly every facet of Banister's life: his training, associates, manuscripts, and extensive list of references. This quality of book is not possible except as a "labor of love." The most important section for coleopterists is Chapter 15:272-307 on insects and arachnids. Data are provided to show Banister's background in entomology and a list of books on the subject. His original manuscript entitled "Collectio insectorum" (1680) is in the British Museum.

Several Coleoptera are described sufficiently to associate them with their current scientific names: Cicindela sexguttata (Fab.)?, Popilius disjunctus (III.), Alaus oculatus (L.) or A.myops (Fab.), Photuris pennsylvanicus, and Canthon pilularius (L.) or C. vigilans (Lec.). In addition to these, there are several others that can be determined only to family: Cantharidae, Scarabaeidae, Cicindelidae, Elateridae, Lucanidae, and Lampyridae.

The account of *Canthon*, our common "tumble bug", is particularly indicative of the careful observations Banister made:

"Scarabeus niger pilularis. This is ye H(oly) Beetle in ye Tab(ula) Hieroglyph(ica) Laudina, mentioned by the Learnd Mr Gregory in his Preface. Here are multitudes of them in ye Summer time, rowling about their little globes of Corruption, which they mould up out of any Excremt: capable of formation: & so I suppose did those of Agypt, though Horus Apollo, to adde more reputation to the Dietie of his Father Apis, woud make ye world beleive they only made use of that of the Oxe. Nor do they, like his, in their motion, observe one constant position of ye Heavens, but tumble them indifferently toward any Quarter. So far indeed he is in ye Right, that when they turn them to ye West, they Look (ye Leading Ceremony will lose no credit, tho I say not Worship) Eastward; For they rowl them with their 'hind feet going Backward: Yet their progression at other times is not Retrograde.

"I have many times diligently observed these sedulous Animals yet never could percieve them to inject any thing into the dung, while they were making it up and as often inspected those rowleing pellets yet could perceive no alteration in the masse of matter through this their motion, till at length (when the weather began to grow coole, & this Insect not at all or rarely to be found) I met with one of those then deserted Balls, in the Center whereof lay a small white Grubbe which possibly might owe it's life to the before mention'd motion and in it's due time become such a Beetle. For I cannot thinke that Nature (who does nothing in vaine) instigates this Insect to take soe much paines to noe end . . . "—R. E. Woodruff.